GE-Pittsfield Citizen's Coordinating Council Berkshire Athenaeum Library Auditorium 1 Wendall Street Pittsfield, MA March 1, 2000 DRAFT Meeting Highlights

Prepared by the Massachusetts Office of Dispute Resolution.

Participants

There were 35 members of the CCC present. The were approximately 100 observers.

Introductions

All members introduced themselves. The proposed agenda was reviewed and finalized.

<u>Opening Remarks</u> by Mindy Lubber, EPA New England Region 1 Regional Administrator

Mindy Lubber highlighted EPA's commitment to the community and the qualities of the agreement reached with GE. She stated that the agreement is not perfect, but has produced real advances and that it is a good agreement that can make a real difference. She reaffirmed that the EPA will review every comment to the CD and will reconsider signing it if there are compelling reasons to do so. She reinforced that EPA staff is working hard to provide people with as many opportunities as possible to provide input and to make sure that everyone is heard, including organizing separate meetings, and providing tours of the river. She repeated EPA's commitment for a cooperative approach that includes economic prosperity, environmental safeguards and protection of public health.

<u>Presentation</u> of Volume I Final Draft Engineering Evaluation/Cost Analysis (EE/CA) Report for the Upper Reach of the Housatonic River

Introduction by Ched Chenasnski

Ched reminded the CCC that the May 1998 action memorandum needed for the removal action, declared the first ½ mile of the river time critical and the next 1½ miles non time critical. He emphasized that the EE/CA is necessary for the 1½ mile stretch of the river. He explained that the EE/CA is a draft document because it must be reviewed by a board of experts (commission by EPA) to make sure the EPA is making a consistent approach. The briefing document for that board will be prepared by the end of March or beginning of April. The EPA is accepting position papers (max 10 pages) from citizen groups or GE. Once the comments of the board of experts have been received (mid June) EPA will introduce the changes required and draft the recommended alternative (called a Chapter 6) by mid July. This draft will be open for public comment for 30 days in mid August. Public meetings will be scheduled at the beginning/end of the comment period. After this, EPA has 30 days to evaluate the comments, make a formal response of every comment and issue an action memo in mid-September, and will start the design of the

clean-up during winter-spring of next year. Throughout this process EPA will meet with landowners to discuss the report, impacts, concerns, and questions and to get feedback. Ched introduced the experts that were consulted in the preparation of the EE/CA as follows:

Dr Mike Palermo (Us Army Corps of Engineers – 25 years of experience in environmental remediation).

Dr Larry Boyer (25 years of experience in environmental assessment, wetlands, ground water, etc)

Dr. Bill Stack (geo-morphologist and hydrologist)

Overview by Joel Lindsay

The EE/CA presentation included a review of the site investigation activities, stating the removal action objectives, studying the extent of removal and estimated removal quantities, explaining the technologies options and its evaluation and a final period of Q&A. The following is a general summary of the presentation. For additional information please consult the report.

The 1 ½ mile includes the section between Lyman Street and the confluence of the East and West branches of the river. It was divided into 11 sub-sections according to their unique characteristics.

<u>Site Investigation Activities</u> included: sampling locations every 100 feet at the top, middle and bottom of both the banks and the riverbed. All samples were tested for PCBs and one in every 10 (10%) for other contaminants. The investigation also included river bed borings done from barges in deep water to determine PCB levels and geotechnical borings of the banks to gather information about the stability of the banks.

<u>Removal Action Objectives</u> include: removing, treating and/or managing river sediments and riverbank soils to prevent human and ecological exposures exceeding risk-based levels, preventing recontamination and downstream migration of contamination, minimization of impacts on wetlands and floodplains, and enhancement of habitat.

PCB Cleanup Criteria: The guidelines for removal are different for sediments, riverbanks and riverbank properties (depending on their use - residential or non-residential). For sediments the criteria are 1 PPM. For riverbank residential properties the criteria is 2 ppm and for riverbank non-residential properties it is 10 PPM.

The investigation shows an estimate mean concentration for PCBs of 19.8 PPM at all depths (0-1 ft: 25.7 PPM, 1-2 ft 33.2 PPM, 2-3 ft 9.4 PPM, 3-4 ft 1.2 PPM, more than 4 ft 1.8 PPM). Therefore, the depth of the excavation (and replacement with clean fill) required to achieve the cleanup criteria of sediments is 2-3 ft for the majority of the EE/CA reach (an estimated of 43.200 CY). For riverbank residential properties the depth of the excavation and replacement with clean fill will be 3 ft and 1-3 ft for non-residential properties (an estimated 46,500 CY). The total estimated removal of soil is 89,700 CY or the equivalent of 6,000 truckloads.

<u>Removal Action Alternatives</u> include: Removal and river diversion alternatives, disposal/treatment alternatives (what to do with it) and restoration alternatives (how to put the river back where it was or better). The EE/CA screening criteria of the different alternatives are: effectiveness (is it going to get the job done?), implementability (how easy/hard is it to do it this way) and the cost of the alternative.

Removal and River Diversion Technologies:

Eliminated:

- *Dredging-* This alternative was considered not to be appropriate because it will require flooding the river to float the barges.
- *Gravity Bypass* This alternative was eliminated because it requires flooding and the use of multiple pipes.
- Alternate Channel- This alternative was eliminated because of space constraints and because it would require excavation of material that might be contaminated.

<u>Alternative 1</u>: Wet Excavation (no diversion)- This includes digging material using excavators from work pads in the river or banks. This is the less costly (\$18.8M) option but the slowest alternative (150 CY/day of sediment). It also requires controls to prevent PCBs flowing down the river. Although this alternative would try to slow the river by putting up barriers, the operator cannot see what is being dug.

<u>Alternative 2</u>: Dry Excavation with sheetpiling and pumping bypass in cobble reach – The river is diverted using sheetpile walls (or bypasses when required). The resulting cells are then de-watered. It is a good excavation/backfill alternative in a relatively dry environment that enables clear views for the operator. This alternative has a rate of 250 CY/day. The downside is that there is a risk of relocation of PCBs during the installation of the walls, requires broad access to riverbanks and has the highest cost of \$25.5M. Water overtopping is also a risk.

Alternative 3: Dry Excavation with pumping bypass (in sections of 15,000 feet at a time)- The river is diverted through pipe on the bank and the excavation areas are de-watered. This is a good excavation/backfill control with the highest excavation rate (300 CY/day), requiring less access to riverbank and costs \$1.4M less than alternative 2. The risks are periodic flooding and water overtopping.

<u>Treatment/Containment Disposal Technologies</u>

<u>Eliminated:</u> capping, incineration (high cost, residues), soil washing (cannot be used in all material- only localized in certain areas with certain material - cobbles, big rocks, etc).

Alternative A: Consolidation at GE with excess disposed off site- This alternative is a proven method that effectively isolates PCBs. The CD allows consolidation of 50,000 CY from the 1 ½ section of the river -excluding the first ½ mile- and the remaining material (approximately 40,000) goes off site. The estimated cost is \$12.4M. If all the material is disposed at GE the cost is \$1.1M

<u>Alternative B:</u> Same as A but all material disposed off-site - If all the material is disposed off-site the cost rises to \$27.4M,

<u>Alternative C</u>: Thermal Desorption with off-site disposal of treated material- This alternative reduces the volume of PCB-contaminated soils and sediments. It requires an on-site treatment area, has a potential for emissions and produces concentrated PCB waste. The cost is \$50.5 M.

<u>Alternative D:</u> Solvent extraction treatment with off-site disposal of treated material- This alternative reduces the volume of PCBs in soils and sediments. The downside is that it requires an extensive setup and work area, requires monitoring of emissions, and management of solvents. The cost is \$41.3 M.

<u>Riverbed Restoration Plan-</u> This plan is the same, regardless of the alternatives selected for removal/treatment. It includes the placement of stable riverbed backfill, the creation of diverse habitat where feasible (stone sizes, boulders) and the use of deflectors, rocks, spurs and weirs.

<u>Riverbank Restoration Plan</u> – This plan is the same for all alternatives. Includes the following restoration methods: re-vegetation, bio-engineering using natural materials (organic) with greater duration, and hard structures such as walls, embankments, etc.

<u>Costs</u> – The alternative cost for removal range from \$18.8M to \$25.5M and for disposal from \$1.1M to \$50.5M.

<u>Next Steps</u> – The next steps, as explained in the introduction include presenting the plan to the remedy review board, finalize the EE/CA with recommended alternative, presenting it to the public for comment (30 days), followed by the action memo (design of the actual work).

Q& A

A member of the CCC wanted to know if the consistency evaluation of the review board implies a bias toward precedents or if the review is based on the merits of the site; is it searching for a best solution even if it requires an innovation. The EPA answered that each project is reviewed on its own merit and that the consistency is related to cleanup levels, the protection of the environment and also the cost of the alternatives. It was stated that the mandate is to look for new technologies without taking out the cost option. Another member of the CCC asked if the alternative of using sheetpiles would mean taking down trees. The answer was yes, although they will be replaced.

A member of the CCC requested clarification about the riverbed restoration plan in regards to the creation of habitats "where feasible". An EPA consultant answered that depending on conditions such as the erosion and the speed of the water, different kinds of habitats will be created.

Another CCC member asked if the mean concentrations found during the investigation showed similar readings in all areas or if spikes and lows of concentration were found. The answer was "both". The means of 19.8 PPM is very conservative. In some cases the EPA has data regarding exact concentration in others they do not and they use conservative averages to avoid any problem

When asked about the size and location of the pipe required for the pumping alternatives, the EPA answered that a pipe of 3 ft in diameter could manage the volume.

One member of the CCC asked if the options have been already determined. The answer was that the options are open and that the EPA will sit down and talk about the alternatives and make sure that everyone understands them. EPA noted that the it has a broad control over the outreach effort because the CD is flexible enough to allow the agencies to work with the community.

EPA stated that different technologies can be used for different sections (not a one-size-fits-all), for example power-washing of cobbles.

A member of the CCC asked if EPA was going to clean contaminated sites in areas adjacent to the river (e.g., the Newel St Parking lot pumping of 1,400 gallons of oil that have been found 20 feet below the river bottom). EPA stated that the CD provides for cleanup of all areas adjacent to the river including groundwater, oil and wells. These areas will be sampled and remediated if contaminated. It may also require construction of walls in some parts of the river. EPA stated that no one wants the river to be contaminated after the cleanup.

Asked about the cleaning criteria for banks, the EPA answered that banks are considered, at a minimum, recreational not commercial (recreation standards are higher than commercial).

A member of the CC asked if the 50,000 CY's allowed at the GE site included material coming from the first $\frac{1}{2}$ mile. The answer was that the CD established limits on the configuration of the GE landfill and that the configuration of the landfill can be used to calculate its capacity. The 50,000 are only for the $1\frac{1}{2}$ mile.

A member of the CCC asked if it was possible to use "pilot projects" to test the technologies. The EPA did not know if this is legally possible and pledged to look into it.

A member of the CCC wanted to know the amount of time the community has to comment on the EE/CA. The answer was that this is a draft report and thus it did not have

a deadline. Once it is finished and published it will undergo a formal comment period of 30 days.

A member of the CCC wanted to know the cost of continued monitoring the GE landfill in the future and who was responsible for that cost. The answer was that this cost is probably very low (ten to twenty thousand a year) and that it is not an added cost because it is included in the CD.

Other questions/request

A member of the audience wanted to know if Rich Pond was contaminated with PCBs. The answer was that although there are no areas that can be considered an imminent hazard, some parts of the pond have more than 2 PPM. EPA will report once the data is available.

A member of the audience requested the help of the agencies in the clean up of a 10x14 garden that has been deemed "clean" because of the "averaging process" but in fact has between 3.5-5 PPM of PCBs. The owner was told previously that they cannot dispose of this material themselves. Representatives of the agencies said they would work with this person to rectify the situation.

One member of the CCC stated frustration for the lack of information regarding what happened during the CD negotiations and for the presence of a landfill behind the school in a residential area. EPA stated that the CD was a cooperative effort and that all parties had to give up something, without compromising health concerns. EPA's lawyer worked very hard to represent public health concerns and interest. Also other public institutions worked to this end such as the Attorney General, the US Department of Justice and the Commonwealth of Massachusetts. GE agreed to put forward money to fix things now.

The EPA and MA DEP will start contacting members of the community for individual and group meetings in order to clarify doubts, resolve questions and receive feedback on the EE/CA.

Next meeting: April 5, 2000 (since rescheduled for April 12) at Berkshire Community College.

To prepare for next meeting: Updates: DPH, GE

Possible 2000 CCC Agenda Items